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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/540,915

10/06/2005

Karl-Gunnar Karlsson

05088

8711

23338 7590 07/06/2009  
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1727 KING STREET  
SUITE 105  
ALEXANDRIA, VA 22314

EXAMINER

MCMAHON, MARGUERITE J

ART UNIT

PAPER NUMBER

3741

MAIL DATE

DELIVERY MODE

07/06/2009

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/540,915	<b>Applicant(s)</b> KARLSSON, KARL-GUNNAR	
	<b>Examiner</b> Marguerite J. McMahon	<b>Art Unit</b> 3741	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 2/25/09.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 5-12 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☐ Claim(s) \_\_\_\_\_ is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All    b) ☐ Some \*    c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)                     | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____                                      |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)          | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____  | 6) <input type="checkbox"/> Other: _____                          |

## **DETAILED ACTION**

### ***Claim Rejections - 35 USC § 112***

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 5-12 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. In claims 5 and 9 "the filter means being disposed at a level such that the filter surface is available which is not contaminated by oil from the crankcase" is unclear. Throughout the claims "the oil outlet" and "the liquid outlet" lack antecedent basis.

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 5-12, as best understood, are rejected under 35 U.S.C. 103(a) as being unpatentable over Shureb (6,345,614) in view of Henrichsen et al (2003/0101701) and Pearce et al (2002/0187703). Note a device for filtering particles from and reducing pressure of air that builds up in a crankcase of an operating internal combustion engine, a filter container 120 having an upstream air inlet 118 including means for connection to the crankcase to remove air under pressure and oil therefrom, and a downstream air outlet 130 including means for connection to the inlet manifold to supply filtered air

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thereto, the air outlet being disposed at a level above the air inlet, a filter means 162 comprising at least one wall of fibrous material running between walls of the filter container, separating the container thereby into an inlet chamber comprising the inlet, and an outlet chamber comprising the air outlet, the liquid outlet 122 being disposed in a lower portion of the inlet chamber and separate from the air outlet, the liquid outlet receiving particles which fall from the filter means and oil from the crankcase and comprising means for connection to the crankcase to return the oil and particles collected by the filter thereto, wherein the filter container has a fixed position in relation to the internal combustion engine, and the filter container has a predetermined angle in relation to the engine. (see Figures 5-8). Shureb shows everything except the fibrous material of the filter comprising needled or thermally bonded fibers, wherein the fibrous material is comprised of fiber mats, in which the fibers have a diameter of 1-40 microns. Henrichsen et al teach that it is old in the art to utilize thermal bonding to bond the fibers together into fibrous mats, the fibers having a diameter of 1-40 microns (see paragraphs 12 and 29). It would have been obvious to one having ordinary skill in the art to modify Shureb by utilizing a filter comprising thermally bonded fibers having a diameter of 1-40 microns, in order to aid in shaping the filter into the needed shape, and as cited by Pearce et al in paragraph 10, thermal bonding enhances the strength characteristics of the material.

### ***Response to Arguments***

.. Applicant's arguments filed 2/25/09 have been fully considered but they are not persuasive. Applicant argues that the Shureb reference does not show a filter material

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extending from the upper portion to the lower portion of the filter case, with air passing transversely through the filter. This is not true. The filter material clearly extends from the upper portion to the lower portion, and defining the transverse direction as perpendicular to the axial direction (from left to right) of the filter, the air does pass transversely through the filter.

Applicant further argues that Hendrichsen et al and Pearce et al do not disclose filter materials for use in a crankcase filter environment nor do they disclose or suggest the structural arrangement of the claimed invention. The references were not relied upon to show these features, so the argument is moot.

### ***Conclusion***

**THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Marguerite J. McMahon whose telephone number is

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571-272-4848. The examiner can normally be reached on Monday- Friday, 10am-6:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael Cuff can be reached on 571-272-6778. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Marguerite McMahon  
Primary Examiner  
Art Unit 3741

/Marguerite McMahon/  
Primary Examiner, Art Unit 3741